REMARKS

Reconsideration of the present application is respectfully requested.

Claims 1-3 and 5-8 have been objected to because of certain informalities noted by the Examiner. As a result, all claims have been amended to correct the noted informalities, as well as other formalities noted by Applicant, and not in response to any of the outstanding claim rejections.

Claims 6 and 7 have been rejected under 35 U.S.C. §102(e) as being anticipated by Liu et al. (PN 6,099,701; hereinafter "Liu"). In addition, claims 1-5 and 8 have been rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Liu and Yamaoka et al. (PN 6,066,891; hereinafter "Yamaoka"). However, as the claimed subject matter of the present invention was invented prior to the effective date of Liu, these rejections are respectfully traversed.

Applicants submit a copy of a Declaration under 37 C.F.R. §1.131, including a copy of DENSO engineering records (hereinafter "Exhibit A") and a translation of those portions of the engineering records that are relevant to the claimed subject matter of the present invention (hereinafter "Exhibit B"), in order to prove that the completion of the claimed present invention occurred prior to the effective §102(a) date of Liu, which is June 28, 1999.

(The Examiner should note that a copy of the DENSO engineering records in Exhibit A was also submitted in response to a rejection under 35 U.S.C. §102(e) of certain claims in the parent application (now U.S. Patent No. 6,650,017) also in view of U.S. Patent No. 6,099,701 to Liu. A translation of the engineering records that were relevant to the claimed subject matter in the parent application was also submitted as Exhibit B in the parent application in order to prove that the completion of the claimed invention occurred prior to the effective §102(e) date of Liu.)

Exhibit A indicates that the first report regarding the invention was made at latest February 10, 1999, and preparation of a Japanese application was requested on June 3, 1999. That is, the conception of the present invention occurred at latest on February 10, 1999, as indicated by the stamp on the right upper space of page 1 in Exhibit A. Constructive reduction to practice of the present invention occurred on August 20, 1999 when a Japanese patent application, JP 11-234272 from which the present application claims priority under 35 U.S.C. §119, was filed by Applicants with the Japanese Patent Office. Applicants assert that preparation and filing of the corresponding Japanese patent application was pursued with due diligence, as the application was filed after only two and half months had elapsed after the request for preparation of the application was made on June 3, 1999.

Exhibits A and B attached hereto show the entire claimed subject matter of the present invention. The limitations recited in claim 1 are supported, for example, on pages 1-2 of Exhibit B. The limitations recited in claim 4 are supported, for example, on page 2 of Exhibit B.

Accordingly, as Applicants conceived of the present invention prior to the effective date of Liu and used due diligence from prior to the reference date to the filing date of the corresponding Japanese application, Applicants assert that they have established prior invention of the claimed subject matter relative to that disclosed in Liu in compliance with MPEP §715.07 (Aug. 2001).

Therefore, in view of the above, it is respectfully requested that the rejection of claims 6 and 7 under §102(e) in view of Liu, and the rejection of claims 1-5 and 8 under 35 U.S.C. §103(a) in view of Liu and Yamaoka, be withdrawn.

Further regarding the Examiner's rejection of claims 1-5 and 8 under 35 U.S.C. §103(a), Applicants assert that, even assuming *arguendo* that Liu was not disqualified as a prior art

reference, one skilled in the art would not be motivated to look to the cited Yamaoka reference to cure the noted deficiencies of Liu.

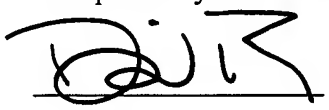
Specifically, Yamaoka describes a method for manufacturing an electrode wiring structure for a semiconductor device that reduces defects in an aluminum alloy wiring layer. In the Yamaoka method, a soft TiN layer 13 is formed to serve as a barrier layer on an underlayer of an Al alloy layer 15. Both layers are then annealed, producing Ti that diffuses inside the Al alloy layer 15 and forms a distortion relaxation layer 14. The distortion relaxation layer 14 suppresses the occurrence of Al voids inside the Al alloy layer 15. (See col. 6, lines 32-54.)

However, the soft TiN layer 13 in Yamaoka is not related to the ARC, or anti-reflection film, of the present invention that is formed by sputtering a TiN film on an aluminum alloy layer as recited, for example, in claim 1. Rather, the sputtered TiN film of the present invention suppresses formation of an AlN layer on the surface of the semiconductor device Al lead pattern and thereby increases the electromigration lifetime of the electrical interconnect leads used in the pattern. (See, for example, page 5, lines 16-20.)

Therefore, one skilled in the art would not be motivated to look to Yamaoka to cure the deficiencies of Liu, as modifying Liu in view of Yamaoka, whose purpose is to suppress Al voids, would render Liu unsatisfactory for its intended purpose of increasing electromigration resistance as in the presently claimed invention. If a proposed modification would render the prior art invention unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. (See In re Gordon, 733 F.3d 900 (Fed. Cir. 1984); cited in MPEP 2143.01, 8th Ed., Rev. 1, Feb. 2003).

In view of the above amendments and remarks, the present application is now believed to be in condition for allowance. A prompt notice to that effect is respectfully requested. Please charge any unforeseen fees to Deposit Account 50-1147.

Respectfully submitted,



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